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Bulletin

clgf

Technology advancing local government for the future

Comment

Microsoft's collaboration with CLGF is longstanding and the three-year Memorandum of Understanding (MoU) formalised our commitments towards our mutual objectives: the better use of ICTs for localising the SDGs; enhancing governance and democratic accountability; making cities inclusive, resilient and safe; and supporting them as engines of economic growth, as well as centres of finance and innovation.

Inclusivity and accessibility needs more attention in cities and Microsoft has been boosting our efforts here, as well as specific support for the initiative led by G3ict on a range of initiatives to ensure that no-one is left behind in the ICT revolution in cities. Microsoft continues to push the boundaries of innovation towards smart and sustainable cities and communities, as well as looking to support regional and national initiatives.

One such example of this engagement dovetails well with the 2019 Local Government Conference, where Microsoft and the Sri Lanka Government signed an MOU focusing on job creation, youth empowerment, public safety and cyber security. You can read more about all these initiatives inside, as well as other case studies from around the Commonwealth.

Please join Microsoft at the global Smart City Expo in Barcelona and the Intelligence-Led Policing and Coordinated Response Days in Brussels in November, 2018; and contact Dr. Andrew Hawkins (ahawkins@microsoft.com) if you would like a copy of Microsoft's Care Continuum Discussion Paper and to learn more about our worldwide research findings with Academia and digital transformation strategy for Social Care and Social Housing and the integration with Healthcare.

David Burrows,
Managing Director, Worldwide Industry,
Microsoft Corporation

Local government needs to deliver not only its services to citizens, but also to take a leading role in its developmental mandate in the delivery of the Sustainable Development Goals. In order to do so, it needs to work efficiently, and to 'push the boundary' on innovation. It is because of this that CLGF highly values its relationship with Microsoft.

With its CityNext programme, local governments can embrace e-governance, digital technology and enhanced performance. In addition, CLGF members themselves have much experience in using technology to advance local government's delivery and development mandate, and there are examples of these and the CityNext programme in this joint CLGF-Microsoft edition of the Bulletin.

Over its long partnership, both organisations have strived to find opportunities to practically demonstrate the value of this collaboration for CLGF members whether it be at the CLGF biennial conference, Commonwealth Sustainable Cities Network or CLGF regional meetings.

All of the articles in this Bulletin are examples of initiatives which help to deepen democracy, stimulate economic growth and development and create socially inclusive and safer cities. I hope you will enjoy reading through them.

Dr Greg Munro,
Secretary-General, CLGF

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MICROSOFT CITYNEXT
FOR YOUR COMMUNITY

As the increase in urbanisation results in new challenges, from modernising ageing infrastructure to meeting the demands for natural resources, there is an opportunity for cities to become more efficient, safer, healthier, more educated and more sustainable places to live and work.

Microsoft CityNext is empowering city, municipal, local and regional governments to realise all these opportunities by helping mayors, governors and departmental leaders embrace the transformative power of digital technology and the cloud. These technologies can help you understand how your organisational systems are performing today and give you insights into how to improve the services you will provide to citizens and businesses tomorrow.

While the future is exciting, there are still challenges to address: shrinking revenues, budget cuts, limited natural resources, ageing citizens, outdated infrastructure, growing energy demands, and rigorous regulatory requirements. Not to mention, the need to understand and provide improved cybersecurity and privacy when moving to digital technology. What to do? Standing still is not an option.

One answer is to take advantage of new capabilities that come with cloud computing, which make solutions more robust and economically viable than ever before. Microsoft's trusted cloud creates a platform to better serve and protect citizens and build more secure, vibrant urban environments. By leveraging technology and working with leading software companies around the world, Microsoft and our partners can help governments, businesses, and citizens shape the future of their regions, cities, and municipalities.

Microsoft CityNext can help build a bridge for your region, city and municipality, starting from where you are today, to leverage existing IT infrastructure as you advance toward achieving what's next – all at your own pace. New citizen services; enhanced public safety; more effective education; more flexible social care and healthcare delivery; ways to ensure a more sustainable environment; and an array of digital leadership programmes that provide workforce reskilling, foster entrepreneurial thinking, and nurture the expansion of an innovation culture.

CityNext is a global initiative that puts the power of our Microsoft Partner Network, our vast technology portfolio, safe and secure cloud computing, successful educational and entrepreneurial programs, and our thirty years of experience in empowering regions, cities and municipalities worldwide all on your side.

Smart sustainable cities

Microsoft teamed up with G3ict before the UN Habitat III conference in Quito *Driving Smart Sustainable Cities Worldwide* with the aim to promote the establishment of smart sustainable cities worldwide which should be placed at the centre in the New Urban Agenda (NUA).

The Global Initiative for Inclusive ICTs (G3ict) and World ENABLED launched in June, 2016 the global *Defining Accessible Smart Cities Initiative*. This collaboration initiative (with sponsorship from Microsoft) has three objectives:

1. Define the problem and raise awareness about the current lack of focus on accessible technology in Smart Cities programmes.

2. Develop the compelling business, policy, and human rights case for aligning accessibility and Smart Cities objectives and efforts.

3. Create the roadmap for a global capacity-building programme that would include a range of tools (e.g. procurement guidelines, communication and marketing guidelines, business and policy initiatives, key technical standards, etc.).

As part of this, a number of work items for Accessibility were identified which, in turn, led to a range of useful tools and guidance; for more information go to www.g3ict.org or www.smartcities4all.org or email info@smartcities4all.org
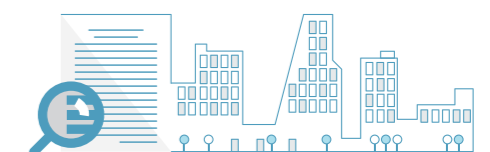
Partnerships in **Jabalpur**

CLGF's work with Jabalpur's Municipal Corporation and their SMART City Team has led to some important advancements in promoting services, tourism and entrepreneurship in the city. Involvement with one of the key cities in the Indian State of Madhya Pradesh began in 2013 and focused on incorporating Local Economic Development in the corporation's SMART City Development work. CLGF supported the strategic development of a conceptual framework for LED and several design and implementation processes for a SMART City programme.

Tourism

Despite serving as a gateway to three popular wildlife sanctuaries, city officials and the local business community felt that the city was failing to take full advantage of the potential tourist footfall to the area. To address this, CLGF, the Jabalpur Municipal Corporation and the SMART City Team held a series of consultation meetings with tourism industry representatives, culminating in a workshop at which a roadmap to promote tourism in the city was developed. This roadmap laid out a multi-faceted plan to target existing visitors and introduce them to the wider offer of the city while, in parallel, upgrading tourist sites and services. This includes ensuring hoteliers, travel agents, taxi drivers etc. are aware of local attractions; engaging a professional institution to train porters, often the first contact point for tourists entering the city by train; providing subsidised rides from the airport; training a group of paryatak-mitra or tourist friends to provide a professional introduction and welcome

to the city. By creating a convivial, tourist friendly environment in the city and using a multi-media strategy to get the message out, tourists are encouraged to visit the city as well as the wildlife parks.

Trades people database

Jabalpur has a large number of skilled trades people: plumbers, electricians, mechanics and gardeners, mainly from poor and marginalised households. A survey revealed, however, that it was often hard to find clients, resulting in a loss of 10 to 12 days' work per month. The flip side to this was the large number of citizens who complained about the difficulty in finding these services. To bridge the gap, a searchable database was created containing information like the services on offer, the contractors' experience and the all-important contact details. Once uploaded to the Municipal Corporation's website, the database provides an invaluable platform for trades people to advertise their skills and for citizens to find the services they need.

Incubation centre

Jabalpur's Municipal Corporation and SMART City Team were happy to partner with CLGF to enrich their work on local economic development, using experience from elsewhere in the Commonwealth. A key objective was to give the city's entrepreneurs a boost and increase the number of small business start-ups. SALGA (the South Africa Local Government Association) and Basildon Council (UK) sent practitioners to share ideas and expertise on how to make this a priority on the ground. The exchange and ongoing link with CLGF has been influential in the work towards the establishment of a hi-tech incubation centre to help the city's budding entrepreneurs develop links and partnerships with industries, technical education institutions and other innovators. It is planned that the centre will offer networking, office space with hi-speed internet facilities, marketing help, legal advice, financial management and accounting, access to venture capital and business training.

Smart moves

David O'Loughlin is President of the Australian Local Government Association and has served as Mayor of Prospect since 2006. A project manager in the construction industry by profession, David is keen on technology, and explains how it is helping councils in Australia to 'work smarter' and deliver more for local communities.

If we want local government to work smarter, there are three main components: firstly, understanding and responding to the needs of the local community; next, building the skills and capacity in communities; and, lastly, harnessing new technology to improve efficiency and service delivery.

In Australia, local government is using technology in a number of ways:

- Sensor street lighting – lighting that dims when no-one is around, comes back on when people are there, and produces pulse lights in response to screams to alert people;
- Smart parking – alerting people of free parking spaces;
- Free Wi-Fi – so people don't need to use their own provider;
- Water leak technology – indicating a loss of water and where the leak is;
- Security CCTV – cameras that detect what's going on and let you know when there is a problem;
- Pedestrian counter devices – Wi-Fi networks that count the number of people in an area, giving information about where they go and how long they stay;
- Traffic conditions - monitoring traffic intensity to adjust traffic control, depending on the flow of traffic; and
- Waste removal - bins have chips to identify which house they're from, allowing them to be returned if picked up elsewhere.

Through very practical changes, technology is improving daily lives and also helping to reduce waste of certain resources. In the longer term, it is enabling councils to plan more intelligently for the future by using the latest information on trends and habits.

It's easy to forget that the core purpose of using technology is to serve people and communities better. Investing in systems to reduce costs and improve service delivery is crucial, but it can also relate directly to what I believe is at the heart of local government – engaging with citizens. We must consult local people and involve them in identifying problems and finding solutions, putting them at the heart of decision-making. The technical focus is exciting, but if we plan correctly, it really can address local needs and create better communities.

Data collection

In Queensland, our member association has been collecting information through data surveys: the number of people in communities, their ages, if they own cars etc. We are all collecting data of some sort and the next big issue is how we use it. We must be able to demonstrate how data usage is bringing about improvements and, to the business community, the benefits of fostering a digital economy.

New technology is not without its risks – cost for one - especially when you don't know what will work, or what your community will want. We have a partnership with the Federal Government that is helping us to trial various projects:

- renewable energy and rain water storage in Perth;
- six councils in Freemantle are working on a trial of electric vehicle shared ownership;
- an irrigation trial in a major park, monitoring systems and management programme for wetlands;
- real time passenger information for a railway station network in partnership with public transport networks and the University of Western Australia;
- real time data on thermal performance of newly built houses to see if products are as energy efficient as they claim;
- trial of driverless electric shuttle services to reduce congestion.

I believe that partnerships are a good way to share risk, cost and gains and I am hopeful and excited about the ways in which local government can deploy technology to address the challenges of the future.

Microsoft case studies

Andhra Pradesh, India: e-Governance and citizen feedback

Andhra Pradesh government first used Microsoft Kaizala during the 12-day Krishna Pushkaram 2016, a large religious event in terms of scale, involving millions of people directly in a short span of 12 days. The organizing team consisted of about 100,000 officers and about 10,000 volunteers. Kaizala enabled the Government of Andhra Pradesh to set new benchmarks in operational efficiency and customer satisfaction in the management of the 12-day mega event involving 20 million people.

AP government soon started deploying Kaizala across its various departments and found enthusiastic adoption across the state government employees. In spite of investments in advanced IT systems, the government's field staff remained largely outside the digital network. To bring their field staff onto the digital network, therefore, was high on the government's agenda. "In just a few months, Kaizala has become an indispensable tool for our field staff and project teams," says Mr. Babu A, CEO, Real-Time Governance. "I am able to broadcast information to all my staff instantly. If I need to the status of an ongoing scheme from across the state, all it takes me is a few minutes to create and publish a poll or survey. In a matter of a few hours, sometimes even minutes, I have enough data at my disposal to get a sense of the ground reality."

Whenever project reviews had to be done, the departments had to send its people into the villages for manual data collection. With the workforce on the field largely unconnected not only with each other but also with the central offices, offline data collection and collation was one of the biggest bottleneck that slowed down the momentum.

With Kaizala, departments are able to make informed choices like never before. Based on actionable insights gathered using mobile-based surveys and analyzed using Kaizala Management Portal, discrete tasks are assigned to the right team member in the right location. With a single tap, team members could share a geo-tagged picture with others to confirm that a specific task at a specific location has been completed. Effective communication between project members and cross-team collaboration has improved organizational productivity.

A Kaizala account is bound to the mobile number of a citizen, for which he or she undergoes a verification process. Its location awareness features enabled the government to determine the exact origination point of the feedback.

On 14th April 2017, the state government launched a citizen connect app. Citizens in the state could download Kaizala and subscribe to this group with a few simple clicks. Within just 48 hours, over 30,000 citizens shared their feedback through this mechanism. Now government staff can consistently seek inputs from citizens about various ongoing projects.

"We started the CM Connect program with a Satisfaction Card but soon realized that we needed a separate card for people to report Corruption and another one for Grievances," says Mr. Babu. "Within ten days, we were able to create these two cards, integrate it with our backend CRM system and launch them on the CM Connect group. Now, citizens can report any instance of corruption from their smartphones and we make sure that the matter is resolved in no time."

The enthusiastic response from citizens towards the CM Connect platform from all over the state and across urban and rural regions has shown that with an easy-to-use mobile application like Kaizala, crowdsourcing authentic citizen feedback is not only possible but also that it can be an indispensable information technology tool for all citizen outreach programmes.

TV White Spaces Broadband Project in rural Kenya: Connecting NGOs, government and communities

As the coordinator for the Laikipia County Red Cross in Kenya, Mr. Anthony Kuria is responsible for liaising between the Laikipia County Red Cross branch outside Nanyuki and its nearby sub-branches, as well as the Kenya Red Cross Society's headquarters in Nairobi. The Laikipia County Red Cross branch and its four sub-branches provide county residents with disaster relief and community empowerment services such as support to families that have lost homes to fires (one of the most prevalent disasters in the region), flood and drought damage relief, automobile accident response and proactive education on topics such as nutrition and first aid.

The Red Cross also provides a hallmark service in disaster situations in attempting to locate and connect missing people with their families. This has traditionally been done using Red Cross Messages, a paper form mailed via postal service to other Red Cross branches. This was a lengthy process – Red Cross Messages would be sent between multiple branches until the family member was located; then the news would take a few days longer to travel back to the initiating branch by mail. Email has expedited the service tremendously, enabling instant communication between Red Cross branches and families.

There is a hitch, however. Not all local areas have Internet access – or even electricity. As a result, expensive and time-consuming travel, phone calls and postal mail are still necessary means of communication between many branches. "We are hoping the TV white spaces technology will help improve communication with our sub-branches and other Red Cross offices by providing Internet access and solar power in more locations," said Mr. Kuria. "The community at large will benefit from the Wi-Fi and electricity available at the Red Cross sub-branches, if they get connected. Having broadband available at additional locations will help us do our jobs more effectively and serve more people in need."

The vision of increased connectivity delivered by TV white spaces technology for organizations in rural communities like the Red Cross extends throughout Africa, beyond the Mawingu pilot in Kenya. Mawingu is part of Microsoft's 4Afrika initiative to improve global competitiveness in Africa. In collaboration with the government of Kenya's Ministry of Information and Communications and Indigo Telecom Ltd., the pilot delivers low-cost wireless broadband access to previously unserved locations near Nanyuki, Kenya. The wireless technology used in the pilot is called dynamic spectrum access, which enables wireless devices to opportunistically tap into unused radio spectrum to establish broadband connections. The project in Kenya uses these new technologies to create broadband connections over the unused portions of wireless spectrum in the television frequency band (so-called "TV white spaces").

The initial installation near Nanyuki currently includes eight customer locations including schools, clinics, libraries and County Government Offices. Employees at the Laikipia County Government Office will also soon be enjoying Office 365 accounts. In early 2014, an additional 33 end user locations will be added to the network, including several more schools and businesses in the area.

Providing broadband to rural areas of Kenya is critical to driving prosperity in rural areas, as well as across Africa as a whole. It gives children and adults a new way to experience learning, and rural communities the ability to connect to the world, improving rural county areas opportunities for economic development via e-commerce and small business growth.

Microsoft formalises partnership with Sri Lanka

Empowering Sri Lanka
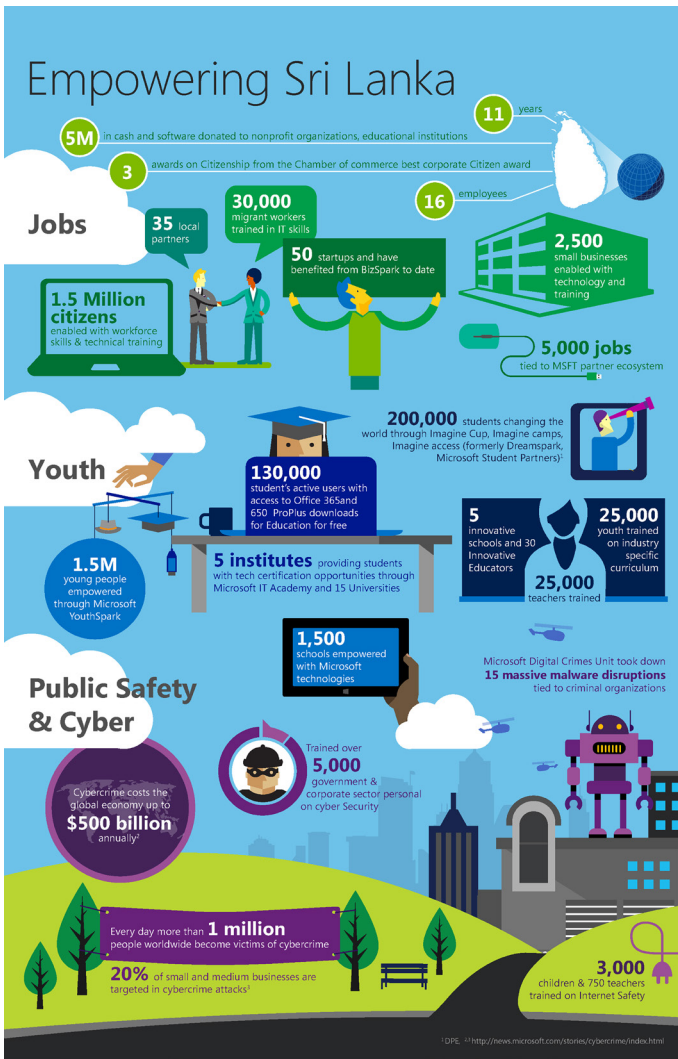
Following 14 years of committed presence by Microsoft in Sri Lanka, the longstanding engagement around digital transformation for better citizen services, good governance and transparency was formalised through a Memorandum of Understanding with the Sri Lanka Government, focused on job creation, youth empowerment, public safety and cyber security.

What's covered under the MOU

| Digital transformation blueprint & policy guidelines for the government of Sri Lanka | Collaborative working environment for public sector for better citizen services | Public sector capacity building and productivity enhancement | Education Transformation with Ministry of Education, in consultation with MTDI to enable 21st century learning | Cyber Security: technical assistance and capacity building |

The MOU in May 2018 was a natural evolution of Microsoft's support of the Government of Sri Lanka's digital transformation journey across public sector, education, innovation and entrepreneurship, as well as small and medium enterprises (SME) to harness the potential of technology, especially cloud computing and the Internet of Things (IoT).

The detailed work plan is in its final stage, led by the Ministry of Telecommunication, Digital Infrastructure and Foreign Employment; covering the five areas illustrated above.

See you at the Commonwealth Local Government Conference 2019 in Colombo!

www.clgc2019.org   Commonwealth Local Government Conference   c l g f